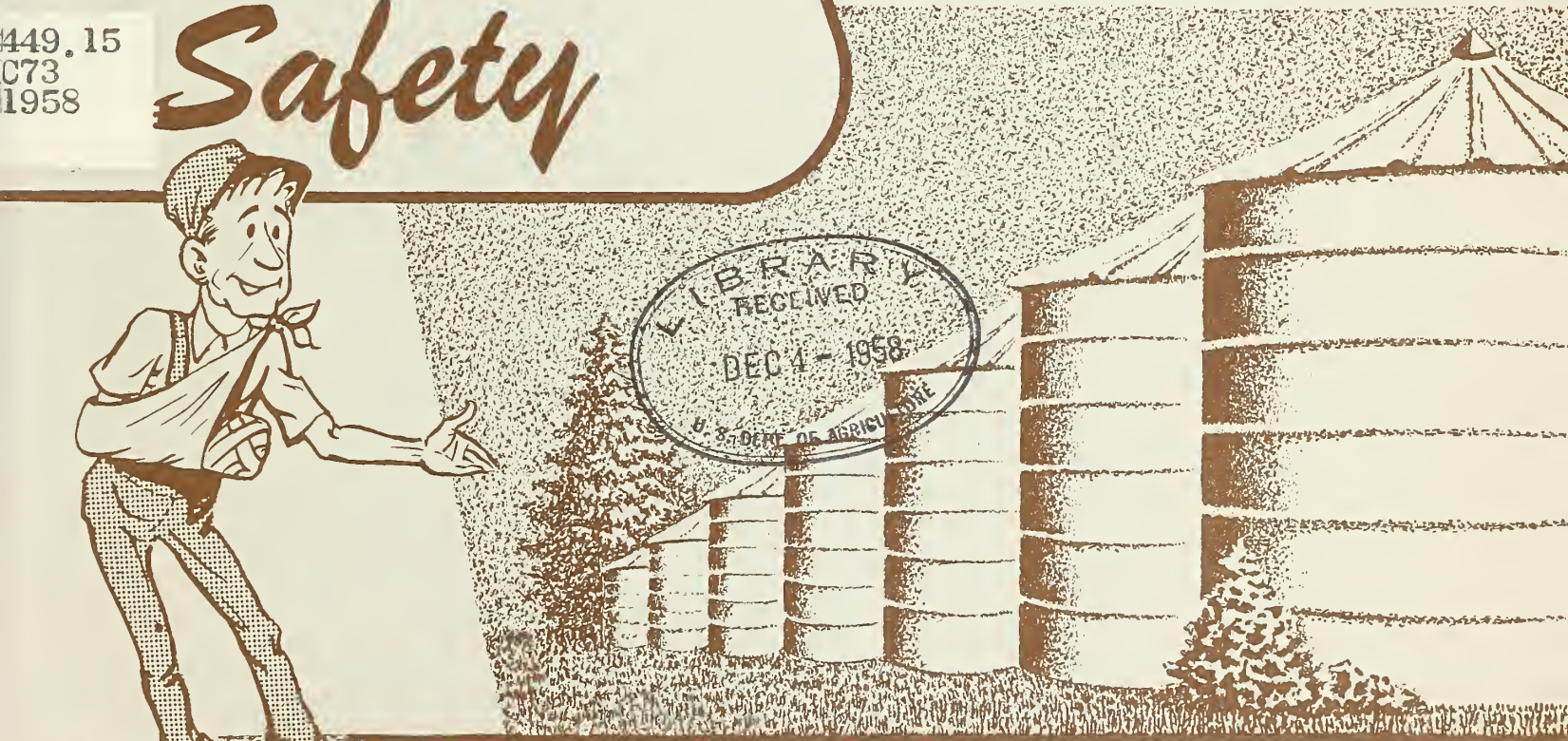
BIN SITE *Safety*



BIN INJURED

UNITED STATES DEPARTMENT OF AGRICULTURE

COMMODITY STABILIZATION SERVICE · WASHINGTON, D. C.

A MESSAGE FROM THE ADMINIST

The work to be done ot our CCC bin sites must be done sofely. Pr
dote is commendoble, but much more remoins to be occomplished.

Extensive effort is underwoy to reduce the number of unsofe conditi
octs—the things thot couse oll occidents. Monogement will provide o
eoch employee to work. Eoch person must oct sofely ot oll times if we
to show improvement.

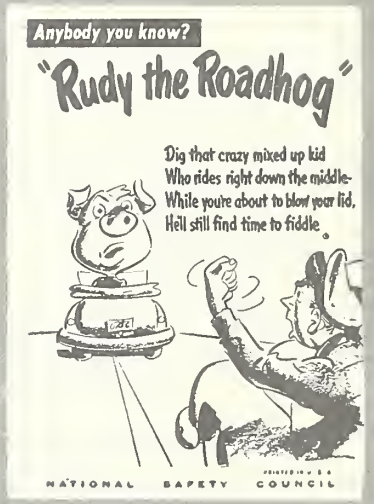
The result of ony lorge group effort is only os successful os the plo
the effort is bosed. It is well thot our supervisors note our Sofety Polic
so importont or urgent thot time connot be spored to plon ond perform th

Revised October 1958

DEFENSIVE DRIVING

We can avoid many accidents if we drive "defensively." Defensive driving could be defined as "looking for trouble so that trouble can be avoided." For example, a defensive driver observes these rules whenever he's at the wheel:

1. In slow or fast traffic, never ride the bumper of the car ahead.
2. Anticipate other drivers' unsignalled actions such as left or right turns and stopping.
3. Keep your eyes moving; never stare straight ahead.
4. Pace your driving to meet all conditions of traffic and weather.
5. Be prepared to act in all situations in such a manner that you avoid accidents no matter what the other person does.
6. Give up the right-of-way if the other driver insists on taking it.
7. Take action to prevent another driver from acting when he appears to be unaware of a dangerous situation.
8. When passing cars parked at curb, observe wheels in order to see if one is moving.
9. At night, allow the range of your headlights to govern your speed; you must be able to stop in this distance.



THE GAMBLER

He was the envy of the race-track gentry. He was only 30 but he knew more about horses than any man twice his age.

His mind was a veritable encyclopedia of facts about every important race horse—blood lines, performance in previous races, etc. He knew the jockeys' records.

In short, he knew when to place his bets—when the odds were right and he stood the best chance to win the most money at the least risk.

After a successful day at the track, this man who knew all the odds got into his car to drive back to town. Traffic was moving along the two lane road at a respectable 50-miles-an-hour clip. But that was too slow for him. At 60 he figured he could save five minutes travel time. So he gunned up to 60 and started passing. He saw the car approaching from the opposite direction too late.

They gave him a nice funeral.

One of his old track pals figured the odds he took when he pulled out of line at 60: "Thirty years old, with maybe 40 years to go. That's 40 multiplied by 365 days a year, with 366 for leap year, makes 14,610 days, times 24 hours a day makes 350,640 hours, times 60 minutes each hour makes 21,038,400 minutes. He tried to save 5 minutes. The odds? 21,038,-400 to 5. Whatta dope!"

Each bin site employee should figure his own odds before he gambles with safety, but don't make the mistake of figuring you have more to gain than lose. Don't take a chance.

Do Drive defensively and be extremely careful at the bin site entrance. Enter at a slow speed, giving hand signals at least 100 yards before your turn. When leaving make sure traffic is clear in both directions.

AUGER TYPE GRAIN ELEVATORS

Many serious accidents have occurred at bin sites that involve grain augers. These accidents occur frequently and usually result in the loss of one or more fingers or toes in addition to broken bones, bruises, and cuts. The cost in terms of pain, suffering, and reduced income deserves special attention by all bin site supervisors and employees.

How auger accidents happen:

1. The receiving end of the auger catches a hand, foot, or the clothing of the employee, usually while the receiving end is covered with grain.

2. During the time the auger is being set up for operations, or taken down, accidents have happened when the auger becomes overbalanced and falls, hitting the employee.

3. Tipping when hopper is emptied and upper end is full and top-heavy. An employee who grabs and misses at this moment may wind up with a hand in a moving part of the machinery.

4. The moving V-belts, pulleys, or motor shafts catch the employee's hands or clothing.

Do Use substantial large size happer. This eliminates need for shoveling spilled grain and pravides firm faating while opening truck tail gates.

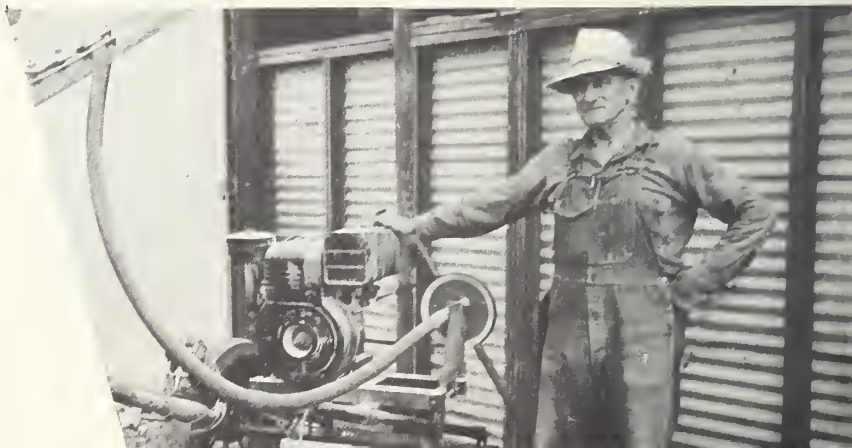
Don't Place hands or clathing near moving and unguarded pulleys, belts or power shafts.

CASE NO. 1. Employee was tending the auger to load wheat from bin for shipping. A canvas was used as a hopper to feed the auger. One side collapsed; employee reached across auger and glove caught pulling his hand into auger. Hand lacerated.

CASE NO. 2. Employee attempted to keep a piece of wood from going into auger while loading wheat for shipment. Caught hand in auger. Hand mangled.

CASE NO. 3. Bin site supervisor attempted to catch and remove foreign material during a shipping operation. Caught finger in auger. Finger amputated.

CASE NO. 4. Employee attempted to adjust burlap sack around auger while auger was in operation. Caught fingers between auger and bin door when auger moved suddenly.



Don't Ploce feet or hands neor end of moving ouger shoft or remain in hopper while ouger is in motion. If auger starts to tip or move "let her go." It is better to damage the equipment than lose severol fingers or toes.

PREVENTIVE ACTION

Taking positive action to prevent accidents is a never-ending responsibility of the bin site supervisor. To the effort made by the supervisor can be added the effort of each employee. When the total effort is sufficient, our bin sites will have fewer accidents. The following are preventive measures that can be used:

1. Install machine guards to protect employees from all moving parts.

2. Employees should not stand on or in the hopper while auger is in operation.

3. Do not cross the hopper when getting in or out of trucks.

4. Make certain that auger motor is properly placed at all times to prevent overbalancing and tipping of the auger shaft.

5. Always shut down machines before making repairs, oiling, refueling, or changing location.

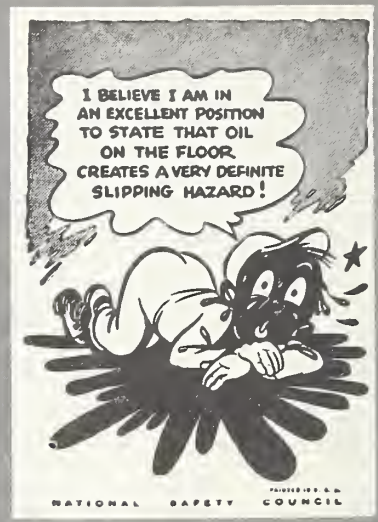
6. Caution truck drivers and other visitors to stay clear of machinery and work operations.

GOOD HOUSEKEEPING

Good housekeeping practices will "pay off" every day. At the bin site including the workshops, you won't need a kitchen apron, but good housekeeping will prevent many accidents there the same as in the kitchen. Evidence of good housekeeping shows in a clean floor or any area where work is in progress. While erecting a grain bin, keep materials and tools not in use out of the way.

Workshop practices must include "a place for everything and everything in its place," including a trash container.

An unlittered floor or work area won't cause anyone to slip or stumble.

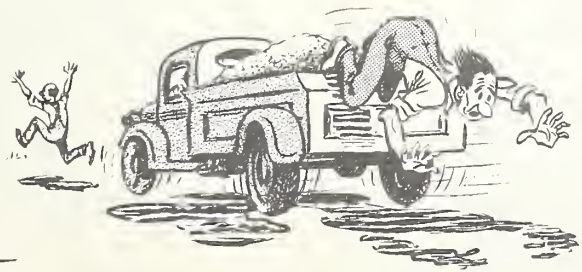


FALLS

Last year falls accounted for 9,263 lost days—and needless suffering of employees. Poor use of ladders accounted for many of the 433 "fall" accidents at bin sites. And just plain carelessness also caused much of the trouble.

A shortcut is all right when a man is on the ground, but when he's on an icy bin roof, with the wind blowing 40 miles an hour, the long way around can be the shortest way home.

Work that requires walking on bin roofs should be postponed in bad weather such as rain, snow, or high winds. Do not jump from one bin to another.



Don't Crowd your work operation—a worker may stumble and fall into moving machinery or under truck. Notice power cord under truck and splice on side rail of ladder.

PREVENTIVE MEASURES

1. Always use a sound ladder of proper size and place it on a firm foundation.
2. Face ladder and hold on with both hands while ascending or descending.
3. Secure ladder at top with a rope or other device if possible.
4. Hoist tools and materials with a rope and bucket or similar arrangement.
5. Work facing the ladder and holding on with one hand. Never over-reach; take time to move the ladder.
6. Always place the ladder so that the horizontal distance from the ladder base to the bin is approximately one-fourth of the vertical height from the ground level to the point where the ladder rests against the bin.

CASE HISTORIES

CASE NO. 1. Employee was replacing hatch cover on top of grain bin while standing on ladder. Ladder slipped on smooth surface of bin throwing him 16 feet to the ground, face downward. While falling he grabbed for a brace which caught one finger and amputated it. He suffered severe internal injuries to the abdomen, liver, and spleen.

CASE NO. 2. Ladder was placed against sloping side of a quonset hut and employee was painting nailheads. Ladder slipped and employee fell to the ground, suffering a compression fracture of the third vertebra. Employee will be disabled for three months.

CASE NO. 3. Employee was climbing into truck to help unload grain when he slipped and fell to the ground. He fractured the sixth vertebra and has considerable weakness in the left hand. Disability lasted two months.

Don't Perch in precorious ploces. Folls ore the biggest single source of occidents to bin site employees.

The bottleship wos in port, ond visitors were being shown oround. The guide pointed to o bronze toblet on the deck ond soid, "Thot's where our brove coptoin fell."

An old lody frowned ond spoke up, "Well, I don't wonder, I neorly tripped on the thing myself."

ELECTRICAL HAZARDS

Electricity is used considerably at our bin sites. And like many things, if used improperly will cause a severe injury. Electrical installations, like all other types, must be made with safety in mind or will have results like the following case history:

A bin site supervisor was on a bin roof to set up a grain auger to be used in transferring grain. A high voltage wire above the bin touched employee's neck. Instantly there was a large flash of flame and the employee fell to the ground.

Six skin and bone graft operations have been performed. Medical costs exceed $20,000 and more operations may be needed. The employee and his family will always be aware of the suffering and loss of income.

PREVENTIVE MEASURES

1. All electrical equipment and materials should be periodically checked for loose connections, frayed wires, or defective parts.
2. Electrical repairs should be performed by a competent electrician.
3. Rope or some other poor conductor of electricity should be used in guiding auger spout.
4. Avoid touching metal grain bins while handling electrical equipment.
5. Ground all electrical equipment, including small hand tools and gathering augers.
6. Grain bins shall not be located within 25 feet of an overhead high-voltage line.

FUMIGATION OF GRAIN

Most grain fumigant mixtures are highly poisonous to human beings when inhaled to excess or absorbed through the skin. One bin site employee was killed and several have been seriously injured while using the ordinary fumigant mixtures, such as 80 percent carbon tetrachloride—20 percent carbon disulfide. Too great a familiarity in using fumigant mixtures may lead to carelessness. No relaxation in observing the safety rules for fumigation can enter your work picture if you are to remain free of fumigant poisoning.

The following is an excerpt from a letter received from the Illinois ASC State Office.

"Our foreman spent some little time explaining to this man the method he should follow in detecting whether or not the canister in the gas mask was functioning properly and whether or not the canister should be changed. This man was operating a spray nozzle during the afternoon of his first day's training. The training foreman felt it was time for him to change the canister and indicated this fact. The individual assured the training foreman the canister and mask were working properly and since they only had a few minutes work yet to complete, it was not necessary to change the canister. About 10 minutes after the above discussion the day's work was completed. The man came to the ground, removed his mask, and immediately became bilious.

"Within a very few minutes the training foreman had the individual on the way to the hospital, and by the time he arrived there he was a very sick man. He remained in the hospital for several days, and under the care of a physician for a considerable period of time after returning home. In fact, this man almost lost his life, and for about 48 hours everyone in our organization who had any responsibility with reference to such operations were terribly fearful that he would lose his life."

He didn't take time to change his filter canister.

Shortcuts are often long chances.

CASE HISTORIES

CASE NO. 1. State bin site supervisor was engaged in the fumigation of grain in his area. Use of canisters as prescribed by the manufacturer did not prevent a serious case of burned lungs with running sores, requiring hospitalization. A higher concentration of fumes than canisters can handle safely could prove fatal.

CASE NO. 2. While fumigating grain, employee was overcome by gas fumes due to a defective gas mask. He fell 16 feet from the top of one of the bins and was knocked unconscious. His ear drum was broken and he was very ill from the gas. He lost 41 days time.

PREVENTIVE MEASURES

1. Always wear gas masks while fumigating.
2. Check carefully for leaks before fumigation starts.
3. Change filter canister as prescribed by Grain Handbook GR–9.
4. Do not fumigate alone.
5. Do not fumigate if weather conditions are not favorable.
6. A used canister should be marked with the amount of time used to protect the next user.
7. Wear adequate protective clothing.
8. Stay out of bins when fumigating.

CUTS

NEVER TREAT A CUT WITH INDIFFERENCE TREAT IT WITH THE PROPER ANTISEPTIC

Most cuts are not dangerous in themselves, but may become so because of infection. For this reason, use first aid kit to treat the cut immediately.

Infection may be caused by the object that inflicts the cut, or it may be caused later by touching another object.

Small cuts have later caused infection so serious as to require amputation. This creates unnecessary suffering, expense, and a reduction in family income.

1. Select the right tool for the job.

2. Keep all tools in good condition for use.

3. Never use any tool with a sharp edge in a manner that will endanger the body.

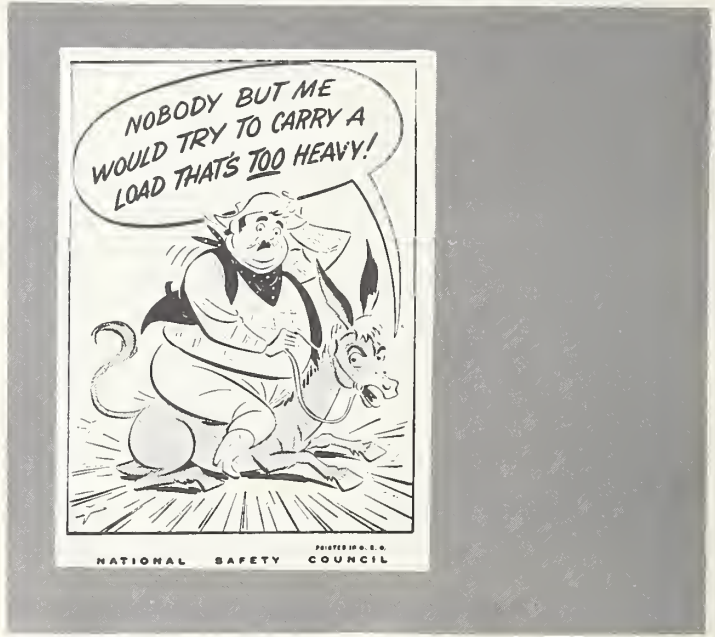
4. Return all tools to their proper place when they are not in use.

5. Keep a first aid kit at each bin site, or with the equipment used by each crew.

6. Always treat cuts immediately with antiseptic.

LIFTING

Don't Lift with yaur back. Bend yaur legs and push straight up, keeping the back as nearly vertical as possible. This decreases the passibility af hernias and back strains.



Too many people are seriously injured today because they failed to learn to lift heavy objects correctly. Just as there is a right and wrong way of doing everything, so is there a right way to lift. See the caption under the picture on the left.

EYE HAZARDS

YOU CAN WORK WITH AN ARTIFICIAL HAND.

YOU CAN WALK ON AN ARTIFICIAL LEG.

BUT YOU CAN'T SEE WITH AN ARTIFICIAL EYE.

Safety regulations place the responsibility for using safety glasses upon the supervisor. Jobs such as grinding, sharpening tools, and operation of a power mower are examples of jobs in which serious eye injuries have occurred. All such injuries could have been prevented if the operator had been wearing safety glasses. It is up to the supervisor's discretion whether or not safety glasses should be used on any other job.

SOMETHING IMPORTANT

Within our accident program we attempt to do many things. Basic to all other efforts is the most important one of all—making sure that everybody has the right attitude toward safety. Anyone without the right attitude will suffer from accidents. Even worse, may cause an accident in which his fellow worker is injured or is killed. You can do the right thing by your work neighbor in many ways, but nothing that he can appreciate as much as being able to continue to provide a full income for his family. How about your family, too?

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WHAT ACCIDENTS COST

The figures that are compiled each year to indicate the cost of injuries to CSS–ASC employees run into several hundred thousand dollars. This annual figure represents the medical cost and the amount of compensation paid. The figure is so large as to be of concern to our government, but the greatest concern represents another viewpoint toward the real cost: the person injured and his family.

A person injured for a few weeks may again have all his faculties to use in earning a living. An injury described as "permanent-disabling" may cost the whole family the following:

1. Less opportunity for children's higher education.
2. No yearly vacation.
3. A lower standard of living.
4. New automobiles less frequently.
5. Less pleasure in living because the head of the household is permanently injured.

Added to the above is one loss that is different. A "permanent-disabling" injury robs the wage earner of any hope for promotion. There will be no long anticipated salary increases resulting from promotions.

SAFETY CERTIFICATION

Each employee working at bin sites is required to carefully read this publication and to observe the precautions listed in performing his daily work. The bin site supervisor is required to point out other work hazards and personally instruct each employee in the safe use of ladders, hand tools, fumigating equipment, and power equipment before he starts to work.

County Office Managers may instruct each employee and supervisor to certify that he has complied with the above requirements by entering the date and signing his name on one of the following lines.

Signature of Employee	Date	Signature of Supervisor	Date